

REMARKS

Applicants have amended their claims in order to further clarify the definition of various aspects of the present invention. Specifically, Applicants have amended claim 1 to recite a therapeutic agent for decubitus, and have further amended claim 1 to recite that this agent includes as an active agent for treating the decubitus, an N-acylated derivative of hydroxyproline or a salt thereof, in an effective amount for therapeutically treating decubitus. Claims 2 and 3 have been amended in light of amendments to claim 1, to recite the therapeutic agent. Claims 7-9 have been amended to recite a method of treating decubitus, and claim 7 has been further amended to recite administering a composition including the specified derivative of hydroxyproline or salt thereof, as an active agent, to an animal or human suffering from decubitus, in an effective amount to therapeutically treat the decubitus.

Applicants have cancelled claims 4-6 without prejudice or disclaimer, and have substituted therefor new claims 10-12. Claim 10 defines a method of manufacturing a therapeutic agent for decubitus, including incorporating in the therapeutic agent an N-acylated derivative of hydroxyproline or a salt thereof as an active agent of the therapeutic agent, this derivative or salt thereof being incorporated in an effective amount for therapeutically treating the decubitus. Claims 11 and 12, dependent respectively on claim 10, and on claim 10 or 11, respectively defines amount of the derivative of hydroxyproline or salt thereof incorporated in the therapeutic agent, and recites that the acyl group of the derivative of hydroxyproline is an acyl group having 1-24 carbon atoms.

New claim 13 recites an agent for prevention of decubitus, which includes as an active agent for prevention of decubitus, an N-acylated derivative of hydroxyproline or a salt thereof, in an effective amount for prevention of decubitus. Claims 14 and 15, dependent respectively on claim 13 and on claim 13 or 14,

respectively recites amount of the derivative of hydroxyproline or salt thereof incorporated in the agent, and recites that the acyl group of the N-acylated derivative of hydroxyproline is an acyl group having 1-24 carbon atoms. Compare claims 13-15 with claims 1-3.

New claim 16 defines a method of prevention of decubitus, which comprises administering a composition comprising an N-acylated derivative of hydroxyproline or a salt thereof to an animal or human being, the derivative of hydroxyproline or salt thereof being included in the composition in an effective amount for prevention of decubitus. Claims 17 and 18, dependent respectively on claim 16 and on claim 16 or 17, respectively recites amount of the N-acylated derivative of hydroxyproline or salt thereof incorporated in the composition; and recites that the acyl group of the N-acylated derivative of hydroxyproline is an acyl group having 1-24 carbon atoms.

Applicants respectfully traverse the rejection of claims 1-9 under the first paragraph of 35 USC 112, as set forth in Item 3 on pages 2-4 of the Office Action mailed November 30, 2006, particularly insofar as this rejection is applicable to the claims as presently amended.

In particular, noting amendments to claims 1-3 and 7-9, and new claims 10-12, reciting therapeutic treatment of decubitus, it is respectfully submitted that this rejection under the first paragraph of 35 USC 112 is moot with respect to these claims 1-3 and 7-12.

In connection with claims 13-18, Applicants respectfully submit that the specification of the above-identified application is enabling for prevention of decubitus, and thus provides an enabling disclosure with respect to claims 13-18.

Thus, attention is respectfully directed to the paragraph bridging pages 17 and 18 of Applicants' specification, setting forth what is meant by "prevention of decubitus".

Contrary to the conclusion by the Examiner, it is respectfully submitted that the examples in Applicants' original disclosure show the preventive effect of N-acylated derivatives of hydroxyproline to decubitus, in addition to therapeutic treatment. Attention is particularly directed to Examples 1 and 2 on pages 26-31 of Applicants' specification. From the results of these examples, it can be seen that the N-acylated derivative of hydroxyproline has a preventive effect for decubitus.

The contention by the Examiner on page 3 of the Office Action mailed November 30, 2006, that Applicants' specification "does not provide any competent evidence or disclosed tests that are highly predictive for the preventive utility of the instant compounds" is respectfully traversed. It is respectfully submitted that Examples 1 and 2 provide competent evidence of preventive utility. As can be appreciated therefrom, at the very least the tests run in the examples can be performed, for determining preventive utility. See In re Angstadt, 190 USPQ 214 (CCPA 1976). In view thereof, it is respectfully submitted that the necessary level of enablement is provided to one of ordinary skill in the art, whose skill is high as indicated by the Examiner in the last full paragraph on page 3 of the Office Action mailed November 30, 2006.

In the first paragraph on page 4 of the Office Action mailed November 30, 2006, the Examiner points to Examples 1 and 2, but then states that there is no demonstrated correlation that the tests and results apply to the claimed prevention utility embraced by the instant claims. Clearly, Applicants set forth in these examples that prevention of decubitus is achieved, especially in light of how Applicants define prevention of decubitus in the paragraph bridging pages 17 and 18 of their specification. It is respectfully submitted that especially in view of Examples 1 and 2, as well as in view of Applicants' disclosure as a whole, Applicants provide sufficient enablement for making and using the presently claimed invention, including

the subject matter of claims 13-18, and the Examiner has not sufficiently rebutted the showing in Applicants' original disclosure. See In re Bowen, 181 USPQ 48 (CCPA 1974); and In re Dinh-Nguien, 181 USPQ 46 (CCPA 1974).

The rejection of claims 4-6 under the second paragraph of 35 USC 112 and under 35 USC 101, set forth in Items 4 and 5 on pages 4 and 5 of the Office Action mailed November 30, 2006, are moot, insofar as applicable to claims 10-12. Thus, claims 10-12 recite a method of manufacturing a therapeutic agent for decubitus, including "incorporating" in the therapeutic agent the recited derivative of hydroxyproline or salt thereof as an active agent of the therapeutic agent. It is respectfully submitted that claims 10-12 clearly set forth processing, and satisfy requirements of 35 USC 112, second paragraph, and 35 USC 101, setting forth a step involved in the process.

The contention by the Examiner in Item 4 on page 4 of the Office Action mailed November 30, 2006, that for examination purposes, claims 4-6 were interpreted as "a method of preventing or treating decubitus", is noted. It is respectfully submitted, however, that claims 4-6 as previously before the Examiner, and present claims 10-12, define a method of manufacturing a therapeutic agent; and it is respectfully requested that claims 10-12 be interpreted in such manner.

Applicants respectfully submit that all claims presented for consideration by the Examiner patentably distinguish over the teachings of the prior art applied by the Examiner in rejecting claims in the Office Action mailed November 30, 2006, that is, the teachings of European Patent Application No. 1,304,323 to Kobayashi, et al., under the provisions of 35 USC 102.

It is respectfully submitted that this reference as applied by the Examiner would have neither taught nor would have suggested such a therapeutic agent for decubitus, or such agent for prevention of decubitus, as in the present claims,

including wherein such agent comprises as an active agent for decubitus an N-acylated derivative of hydroxyproline or a salt thereof, in an effective amount for therapeutically treating, or for prevention of, decubitus. See claim 1; note also claim 13.

Furthermore, it is respectfully submitted that the applied reference would have neither disclosed nor would have suggested such agent as in the present claims, wherein the N-acylated derivative of hydroxyproline or salt thereof is incorporated in an amount as set forth in claims 2 and 14; and/or wherein the acyl group of the N-acylated derivative of hydroxyproline is an acyl group having 1-24 carbon atoms (see claims 3 and 15).

Moreover, it is respectfully submitted that the applied reference would have neither taught nor would have suggested such method of manufacturing a therapeutic agent for decubitus as in the present claims, including incorporating in the therapeutic agent an N-acylated derivative of hydroxyproline or a salt thereof as an active agent, for therapeutically treating decubitus, with this derivative of hydroxyproline or salt thereof being incorporated in an effective amount for therapeutically treating the decubitus. See claim 10.

Furthermore, it is respectfully submitted that the applied reference would have neither taught nor would have suggested such manufacturing method as in the present claims, including wherein the N-acylated derivative of hydroxyproline or salt thereof is incorporated in the therapeutic agent in the amount as in claim 11; and/or wherein the acyl group of the N-acylated derivative of hydroxyproline is an acyl group having 1-24 carbon atoms (see claim 12).

Moreover, it is respectfully submitted that the applied reference would have neither disclosed nor would have suggested such a method of treating decubitus, or such a method of prevention of decubitus, as in the present claims, which includes

administering a composition including the N-acylated derivative of hydroxyproline or a salt thereof, in an effective amount so as to therapeutically treat the decubitus (see claim 7) or for prevention of decubitus (see claim 16).

In addition, it is respectfully submitted that the teachings of the applied reference would have neither taught nor would have suggested such method of treating decubitus or of prevention of decubitus, including the administering as discussed previously, and, moreover, wherein the N-acylated derivative of hydroxyproline or salt thereof is incorporated in the composition in an amount as set forth in claims 8 and 17, and wherein the acyl group of the N-acylated derivative of hydroxyproline is an acyl group having 1-24 carbon atoms (see claims 9 and 18).

As described in the second paragraph on page 2 of Applicants' specification, various applications containing N-acylated derivative of hydroxyproline have been proposed. But it has not been known that the N-acylated derivative of hydroxyproline or salt thereof has a preventative and therapeutic effect for decubitus. The present Applicants have found that such derivative of hydroxyproline or salt thereof has a therapeutic effect for decubitus, and, in addition, can prevent decubitus, and in view thereof provide the present invention.

No. 1,304,323 discloses skin epidermal ceramide synthesis accelerators, and agents for improving skin epidermal barrier function and for preventing or improving atopic dermatitis. The disclosed agents comprise, as an active ingredient, hydroxyproline or an N-acyl derivative thereof, or a salt thereof. This patent document goes on to describe, in paragraph [0008] thereof, that hydroxyproline or N-acyl derivatives of hydroxyproline, or salts thereof, have an effect to accelerate ceramide synthesis in the skin epidermal stratum corneum. See also paragraph [0027] on pages 4 and 5 of No. 1,304,323, describing that the amount of the hydroxyproline or the N-acyl derivative of hydroxyproline, or salt thereof, contained in

the skin epidermal ceramide synthesis accelerator, can, for example, be an amount of 0.001-50% by weight. Note also paragraph [0052] on page 6 of No. 1,304,323.

It is emphasized that No. 1,304,323 discloses skin epidermal ceramide synthesis accelerators, and agents for improving skin epidermal barrier function and for preventing or improving atopic dermatitis. It is respectfully submitted that this reference does not disclose, nor would have suggested, treatment of or prevention of decubitus; and, in particular, wherein the N-acylated derivative of hydroxyproline or a salt thereof is included as an active ingredient for therapeutically treating or for prevention of decubitus, and/or is incorporated in an effective amount for therapeutically treating or prevention of decubitus, and advantages thereof; and/or other features of the present invention as in the present claims, as discussed previously, and advantages thereof.

The Examiner contends that, with respect to claims 1-3, although No. 1,304,323 is silent about the functional characteristic or property, such characteristic or property is deemed to be inherent in the reference composition. Note, however, that the claims as presently amended recite that the derivative of hydroxyproline or a salt thereof is an active agent for the decubitus, and also recites that the derivative of hydroxyproline or salt thereof is included in an effective amount for therapeutically treating decubitus. As the applied European patent application does not disclose use of the composition for decubitus, it is respectfully submitted that this patent document would not have suggested, much less disclosed, the agent of present claims 1-3.

Moreover, in connection with claims directed to treating or prevention of decubitus, again it is emphasized that the applied European patent application does not disclose, nor would have suggested, such property or characteristic of compositions disclosed therein. As the reference does not even refer to decubitus, it

is respectfully submitted that one of ordinary skill in the art would not have been led to such method as in claims 7-9 and 16-18, of administering the composition to an animal or human being, in an effective amount for prevention of, or to provide therapeutic treatment of, decubitus.

The double patenting rejection over claims 1-8 and 15-19 of U.S. Patent No. 7,138,386, set forth in Item 7 on pages 7 and 8 of the Office Action mailed November 30, 2006, is noted. In connection with this double patenting rejection, the Examiner acknowledges that the patent is silent about the functional characteristic of the N-acylated derivative of hydroxyproline or salts thereof. Especially in view thereof, it is respectfully submitted that, clearly, the subject matter claimed in No. 7,138,386 would have neither taught nor would have suggested such agent, or such manufacturing method, or such treatment method, as in the present claims, including, inter alia, wherein the N-acylated derivative of hydroxyproline or salt thereof is an active agent for treatment or prevention of decubitus, and is utilized "in an effective amount" for prevention of, or so as to therapeutically treat, decubitus; and/or the other features of the present invention, including the specified range of amounts, and size of the acyl group of the N-acylated derivative, as in the present claims.

The additional contention by the Examiner on page 7 of the Office Action mailed November 30, 2006, that both the instant application and No. 7,138,386 "are directed to the same composition comprising N-acylated hydroxyproline derivative", is respectfully traversed. Thus, claim 1 of No. 7,138,386 is directed to a pharmaceutical composition which comprises an N-acylated hydroxyproline derivative or a salt thereof, an amino sugar or a salt thereof, and a glycosaminoglycan or a salt thereof, with claims such as claim 7 of the patent reciting a method for treating arthritis including administering the pharmaceutical

composition. Such subject matter claimed in No. 7,138,386 is not the “same composition” as in the present claims, and, in particular, emphasizing that No. 7,138,386 is for treatment of arthritis (e.g., rheumatoid arthritis), would have neither taught nor would have suggested such agent, or method of manufacture, or method of use, as in the present claims, including the N-acylated derivative of hydroxyproline or a salt thereof as an active agent in the therapeutic treatment of, or prevention of, decubitus, and amount of this active agent.

Applicants respectfully traverse the provisional rejection of claims 4-9 on the ground of nonstatutory obviousness-type double patenting, over claims 15-20 of copending Application No. 10/250,372. Initially, it is to be noted that the claims of the above-identified application and of No. 10/250,372 are in status where amendments thereto are proper; and it is respectfully requested that any further rejection be held in abeyance until final claims are set forth.

In any event, note that claims 15 and 17-19 of No. 10/250,372 are directed to a method for reducing incidence of rheumatoid arthritis, by administering an effective amount of an N-acylated hydroxyproline derivative or a salt thereof before the onset of a rheumatoid arthritis. Such method of reducing incidence of rheumatoid arthritis would have neither taught nor would have suggested the method of manufacture, or method of use, as in the present claims, including wherein the N-acylated derivative of hydroxyproline or a salt thereof is an active agent for the decubitus, and wherein such derivative of hydroxyproline or salt thereof is used in an effective amount for therapeutically treating, or for prevention of, decubitus; or wherein the composition is administered to an animal or human suffering from decubitus.


In view of the foregoing comments and amendments, reconsideration and allowance of all claims presently pending in the above-identified application are respectfully requested.

May 30, 2007

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Authorization is herein given to charge any shortage in the fees, including extension of time fees and excess claim fees, to Deposit Account No. 01-2135 (Case No. 506.44955X00), and please credit any excess fees to such deposit account.

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP

A handwritten signature in black ink, appearing to read "William I. Solomon", written over the printed name.

William I. Solomon
Registration No. 28,565

1300 North Seventeenth Street
Suite 1800
Arlington, VA 22209
Tel.: 703-312-6600
Fax.: 703-312-6666

WIS/slk